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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO.  |
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| 09/972,899  | 10/10/2001  | Hannu Toyryla        | P 283782<br>2010638US/Ka/kp  | 4459              |
| 909   | 7590        | 05/14/2004           | EXAMINER<br>NGUYEN, JOSEPH D |                   |
| PILLSBURY WINTHROP, LLP<br>P.O. BOX 10500<br>MCLEAN, VA 22102 |             |                      | ART UNIT<br>2683             | PAPER NUMBER<br>7 |
| DATE MAILED: 05/14/2004                                       |             |                      |                              |                   |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/972,899

Applicant(s)

TOYRYLA, HANNU

Examiner

Joseph D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Maggenti et al. (6,477,150).

Regarding claim 17, Maggenti et al. discloses a network element for managing packet mode group communication, said network element being provided in a data network overlaying a radio access network (abstract, fig. 1-3), comprising:

a) means for receiving a single uplink packet stream from a sending party of group communication, said uplink packet stream being addressed to said network element and containing information that associates it with said group communication (abstract, fig. 1-7, col. 2 lines 16-67, col. 4 line 13 thru col. 8 line 28),

b) means for multiplying said uplink packet stream into at least said first and second downlink packet streams, each of which is individually addressed to one recipient of said group communication and contains additional information indicating to the radio access network that the stream is associated with the specific group

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communication (fig. 1-3, col. 6 line 24 thru col. 7 line 28, and col. 21 line 33 thru col. 22 line 58),

c) means for sending each of said downlink packet streams to the radio access network or networks serving the recipients of the group communication (abstract, fig. 1-3, 7-10, col. 4 line 13 thru col. 7 line 28).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti et al. (6,477,150) in view of Yarwood (WO 94/28687).

Regarding claim 1, Maggenti et al. discloses a method for point-to-multipoint communication on a communications network (abstract, fig. 1-3, col. 2 lines 11-24), comprising:

a) receiving at a radio access network a first downlink packet stream addressed to a first mobile recipient (abstract, fig. 1-3, col. 4 lines 13-25),

b) checking whether the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as

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said first mobile recipient (fig. 1-3, 7, col. 5 line 26 thru col. 7 line 28, col. 25 line 51 thru col. 33 line 54), and

if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40), or

if the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second mobile recipient located in the same radio cell as said first mobile recipient, allocating no new radio resources for the first downlink packet stream but instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40). However, Maggenti et al. does not specifically disclose checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources.

Yarwood teaches checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio

cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (abstract, fig. 1, page 1 thru page 15). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Maggenti et al. with the teaching of Yarwood of checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources in order to distribute the packet to all the group member involve in the group call, and to release and reuse the resource.

Regarding claim 2, Maggenti et al. further discloses a method as claimed in claim 1, wherein said step of receiving comprises receiving said first and second downlink packet streams from a group server controlling said group communication (communications manager (CM)) (#218 fig. 3, fig. 8-9, col. 5 line 26 thru col. 7 line 28, and col. 16 lines 3-27).

Regarding claim 3, Maggenti et al. further discloses a method as claimed in claim 1 or 2, wherein the radio access network requests an originator of said first and second downlink packet streams to suppress said first downlink packet stream, if the first mobile recipient is instructed to receive the radio resources already reserved for

another mobile recipient located in the same cell (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40, and col. 41 line 5 thru col. 43 line 16).

Regarding claim 4, Maggenti et al. further discloses a method as claimed in claim 1 or 2, wherein said packets contain speech information (fig. 1, col. 4 lines 13-47).

Regarding claim 5, Maggenti et al. further discloses a method as claimed in claim 1 or 2, wherein said packets are Internet Protocol (IP) packets (col. 8 lines 11-42).

Regarding claim 6, Maggenti et al. further discloses a method as claimed in claim 1 or 2, wherein said packets contain speech information according to Voice over IP (VoIP) recommendations (col. 6 lines 24-47, col. 8 lines 11-42).

Regarding claim 7, Maggenti et al. discloses a method for point-to-multipoint communication on a communications network (abstract, fig. 1), comprising:

a) receiving at a group server controlling group communication a single uplink packet stream from a sending party of said group communication, said uplink packet stream being addressed to said group server and containing information that associates it with said group communication (abstract, fig. 1-7, col. 2 lines 16-67, col. 4 line 13 thru col. 8 line 28),

b) multiplying said uplink packet stream into at least two downlink packet streams, each of which is individually addressed to one recipient of said group communication (col. 21 line 33 thru col. 22 line 58),

c) sending said downlink packet streams to the radio access network or networks serving the recipients of the group communication (abstract, fig. 1-7, col. 2 lines 16-67, col. 4 line 13 thru col. 8 line 28),

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d) receiving at a radio access network a first downlink packet stream addressed to a first mobile recipient (abstract, fig. 1-7, col. 4 lines 13-25),

e) checking whether the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient (fig. 2-9, col. 5 line 26 thru col. 7 line 28), and

f) if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40), or

if the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second mobile recipient located in the same radio cell as said first mobile recipient, allocating no new radio resources for the first downlink packet stream but instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40). However, Maggenti et al. does not specifically disclose checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink



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stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources.

Yarwood teaches checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (abstract, fig. 1, page 1 thru page 15). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Maggenti et al. with the teaching of Yarwood of checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources in order to distribute the packet to all the group member involve in the group call, and to release and reuse the resource.

Regarding claim 8, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 9, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 10, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 11, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 12, Maggenti et al. discloses a mobile communications system (abstract, fig. 1-3, col. 2 lines 11-24), comprising:

a) means for receiving a first downlink packet stream addressed to a first mobile recipient (abstract, fig. 1-3, col. 4 lines 13-25),

means for checking whether the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient (fig. 2-9, col. 5 line 26 thru col. 7 line 28), and

means responsive to the first downlink packet stream not being associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, for allocating new radio resources for said first downlink stream (fig. 2-9, col. 5 line 26 thru col. 7 line 28), or

means, responsive to the first downlink packet stream associated with group communication which has already reserved downlink radio resources for a second mobile recipient located in the same radio cell as said first mobile recipient, for allocating no new radio resources for the first downlink packet stream but instructing said first mobile recipient to receive said second downlink packet stream over said

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already reserved radio resources (fig. 2-9, col. 5 line 26 thru col. 7 line 28). However, Maggenti et al. does not specifically disclose checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources.

Yarwood teaches means for checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (abstract, fig. 1, page 1 thru page 15). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Maggenti et al. with the teaching of Yarwood of checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already

reserved radio resources in order to distribute the packet to all the group member involve in the group call, and to release and reuse the resource.

Regarding claim 13, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 16, Maggenti et al. discloses a network element controlling radio resources in a radio access network receiving downlink packet streams addressed to mobile recipients located within said radio access network (abstract, fig. 1-3), wherein:

a) said network element, which is responsive to receiving at the radio access network a first downlink packet stream addressed to a first mobile recipient (abstract, fig. 1-7, col. 4 lines 13-25),

b) checks whether the first downlink packet stream is associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient (fig. 2-9, col. 5 line 26 thru col. 7 line 28),

c) said network element, which is responsive to the first downlink packet stream not being associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocates new radio

resources for said first downlink stream (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40), and

d) said network element, which is responsive to the first downlink packet stream being associated with group communication which has already reserved downlink radio resources for a second mobile recipient located in the same radio cell as said first mobile recipient, allocates no new radio resources for the first downlink packet stream but instructs said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (fig. 2-3, 7-13, col. 5 line 26 thru col. 8 line 67, col. 10 lines 20-40). However, Maggenti et al. does not specifically disclose checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources.

Yarwood teaches checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources (abstract, fig. 1, page 1 thru page 15). Therefore, it would have been obvious to one ordinary skilled in

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the art at the time the invention was made to modify the Maggenti et al. with the teaching of Yarwood of checking if the first downlink packet stream is not associated with group communication which has already reserved downlink radio resources for a second downlink packet stream of a second mobile recipient located in the same radio cell as said first mobile recipient, allocating new radio resources for said first downlink stream resources, and instructing said first mobile recipient to receive said second downlink packet stream over said already reserved radio resources in order to distribute the packet to all the group member involve in the group call, and to release and reuse the resource.

5. Any response to this action should be mailed to:

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703 308-9051, (for formal communication intended for entry)

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Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA. Sixth floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen



May 10, 2004



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SUPERVISORY PATENT EXAMINER  
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